

QUESTION PAPER

Subject: **Fitter**

Code: **2.11 / 131**

Sr. No.:

Roll No.:

Signature of the Invigilator

Date: 14.04.2005

Duration: 2 Hours

Time: 09:00 Hrs. to 11:00 Hrs.

Max. Marks: 120

Instructions: Please read the following instructions carefully before writing your answers:

- 1) All Questions are compulsory.
- 2) Each Questions carries 1 mark.
- 3) There are four alternatives - (A), (B), (C), (D) given against each question out of which only one is the most appropriate answer. **If (A) is correct, round on the correct alternative like (A) .**
- 4) If a question is answered wrongly or more than one answers are marked, 0.25 marks will be deducted for each such question.
- 4) No sheet from the Question Paper / Answer Book should be detached.
- 5) **Please DO NOT repeat DO NOT write your name anywhere on the Question Paper.**

1.Which file is used for filing rough edges of soft metal castings?

- A.Bastard file
- B.smooth file
- C.Second cut file
- D.Dead smooth file

Ans: A

2.Trepanning type cutters are used for making holes on sheets is?

- A.Large
- B.Small
- C.Medium
- D.All of above

Ans: A

3.The operation performed for reducing the web thickness is called?

- A.Making a pilot
- B.Thinning the point
- C.Draw centre line
- D.None of above

Ans: B

4.Hacksaw blades is made by?

- A.Mild steel
- B.Cast iron
- C.High carbon
- D.Pig iron

Ans: C

5.The taper shank drills are held on the machine means of?

- A.Drift
- B.vice
- C.Sleeves

D.Chucks

Ans: C

6.A sine bar is used for?

- A.Measuring the diameter of holes
- B.Checking the profile of a thread
- C.Levelling the job for drilling
- D.Finding the angle of a taper job

Ans: D

7.The slight convexity is given to the cutting edge to?

- A.Allow the lubricant to enter
- B.Cut curved surfaces
- C.Prevent digging of the ends
- D.Cut sharp corners

Ans: C

8.Which is used for dressing fine and delicate wheels?

- A.Star wheel
- B.Grinding wheel
- C.Spindle wheel
- D.None of these

Ans: A

9.The component of the surface texture upon which the roughness is superimposed?

- A.Waviness
- B.Primary texture
- C.Roughness
- D.Lay

Ans: A

10.A jig is a special device?

- A.Which holds, supports, locates and also guides the cutting tool
- B.Which locates the cutting tool
- C.Which holds the job
- D.Which guides the tool

Ans: A

11.The portion of the shaft carried in the bearing is often referred to as?

- A.Journal
- B.Cage
- C.Thrust
- D.Race

Ans: D

12.The part of a vernier bevel protractor on which main scale divisions are marked is the?

- A.Adjustable blade
- B.Disc
- C.Dial
- D.Stock

Ans: C

13.The thread angle of I.S.O. metric thread is?

- A.55
- B.60
- C.45
- D.None of above

Ans: B

14.Which among the following is not a capability of reamers?

- A.Finishing any machined profiles
- B. Producing high quality surface finish
- C.Finishing small holes
- D.Accuracy to closer limits

Ans: B

15.As per BIS standard sheet strips are designated by?

- A.Thickness x ISST x width as per IS 1730
- B.ISST x Thickness x width as per IS 1730
- C.ISST x width x Thickness as per IS 1730
- D.width x ISST x Thickness as per IS 1730

Ans: C

16.Parallel blocks are used for?

- A.Setting workpieces horizontal
- B.Levelling machine tools
- C.Marking parallel lines along an edge
- D.Cutting parallel keyways

Ans: C

17.Which among the following is not a characteristic of granite surface plates?

- A.Burrs are formed when scratched
- B.Rust proof
- C.Dense and stable material
- D.Retains high accuracy

Ans: A

18.The convexity of files helps?

- A.To file convex surfaces
- B.The file to become straight when pressure is applied
- C.To file concave surfaces
- D.To prevent rounding of edges of work

Ans: B

19.Tab washers are used for?

- A.Locking the nuts
- B.Preventing vibration
- C.Self locking
- D.Fastening structural fabrication work

Ans: A

20.The principle of working of a dial test indicator is?

- A.The linear motion is converted into a rotary motion using rack and pinions
- B.Magnification by electronic means
- C.The linear motion is converted into a reciprocating motion, using slotted link
- D.Magnification of small variation using lenses

Ans: A

21.The equivalent of 1" in metric is?

- A.24.5 mm
- B.25.04 mm
- C.2.54 mm
- D.25.4 mm

Ans: D

22.The feeler gauge is used for?

- A.Checking the accuracy of the hole locators.
- B.Checking surface roughness
- C.Checking the gap between mating parts
- D.Checking the radius of workpieces

Ans: C

23.A drilling machine used by a carpenter for cabinet making is a?

- A.Breast drilling machine
- B.Sensitive drilling machine
- C.Ratchet drilling machine
- D.Radial drilling machine

Ans: A

24.Formation of a chip while cutting is based on the?

- A.Clearance and wedge angle of the tool
- B.Clearance angle of the tool
- C.Rake angle of the tool
- D.Clearance angle of the tool

Ans: C

- A.The rake angle is less
- B.The clearance angle is more
- C.The rake angle is more
- D.The clearance angle is less

Ans: D

26.The least count of a vernier metric micrometer is?

- A.0.0001 mm
- B.0.001 mm
- C.0.01 mm
- D.0.1 mm

Ans: B

27.The wearing of machine parts is due to?

- A.Abrasion
- B.Impact
- C.Corrosion
- D.Erosion

Ans: D

28.One yard is equal to?

- A.36 inches
- B.42 inches

A.12 inches

A.6 inches

Ans: A

29.The point angle for a standard drill is?

A.108 deg

B.135 deg

C.60 deg

D.118 deg

Ans: D

30.The suitable cutting fluid for drilling mild steel drilling machine is?

A.Coolant oil

B.Distilled water

C.Neat oil

D.Soluble oil

Ans: D

31.Curved cut file used for?

A.Filing wood, rubber etc.

B.Filing brass, aluminium, bronze etc.

C.Filing tin, copper, lead etc.

D.Removes hard materials faster

Ans: C

32.Which one is quick drying and sticks to surfaces well?

A.Copper sulphate

B.Prussian blue

C.Whitewash

D.Cellulose lacquer

Ans: D

33.Which is used for location of divider points?

A.Scriber

B.Centre punch

C.Prick punch 30 deg

D.Caliper

Ans: C

34.One millimetre is equal to?

A.0.0001 m

B.0.001 m

C.0.01

D.None of above

Ans: B

35.Which caliper is can be set quickly?

A.Long point caliper

B.Adjustable caliper

C.Spring type caliper

D.None of these

Ans: C

36. Drill chucks are fitted on the drilling machine by means of a?

- A. Pinion and key
- B. Drift
- C. Knurled ring
- D. Arbor

Ans: D

37. The Morse taper provided on drill ranges between?

- A. MT0 to MT4
- B. MT1 to MT5
- C. MT0 to MT5
- D. MT1 to MT4

Ans: C

38. A drift is used for?

- A. Removing the drill from the machine spindle
- B. Drawing a drill location
- C. Removing a broken drill from the work
- D. Axing chuck on the machine spindle

Ans: A

39. The distance a drill advances into the work in one minute is?

- A. RPM
- B. Cutting speed
- C. Feed
- D. None of above

Ans: C

40. The name of the standard taper provided on drills is?

- A. Cutting tool
- B. Shank
- C. Drift
- D. Morse taper

Ans: D

41. The cutting angle for chipping cast iron is?

- A. 90 deg
- B. 37.5 deg
- C. 60 deg
- D. 55 deg

Ans: C

42. Which one among the following is not depended upon for locating and holding?

- A. The number of components to be machine
- B. The material of the workpiece
- C. The size and shape of the component
- D. The nature of machining operations

Ans: B

43. The datum, from which the measurements of vernier height gauge are taken, is?

- A. The vernier slide
- B. The base
- C. Above the scribe point

D.The beam

Ans: B

44.The length of a sine bar is the distance between?

- A.Outside to outside distance between rollers
- B.One end to another end of the sine bar
- C.Centre to centre distance between rollers
- D.Diagonal cross length of the sine bar

Ans: C

45.The distance, which the cutting edge of a passes over the material in a minute which making, is known as?

- A.Cutting speed
- B.RPM
- C.Machine Speed
- D.Feed

Ans: A

46.A fixture is a production tool that?

- A.Locates and holds the component
- B.Locates the component
- C.Holds the component
- D.Controls the cutting tool

Ans: C

47.In a plain bush bearing, to prevent the rotation of bush in the housing, it should be fitted by means of?

- A.Brazing
- B.Soldering
- C.Welding
- D.Key or screw

Ans: D

48.The part of a vernier height gauge on which the main scale divisions are graduated is the?

- A.The vernier plate
- B.Base
- C.Beam
- D.Fine setting device

Ans: C

49.The reamer teeth are unevenly spaced because?

- A.The help to cut metal gradually
- B.They are easy to manufacture
- C.They help to remove the reamer easily
- D.They can reduce chattering

Ans: A

50.The size of the angle plates is stated by?

- A.Length x width
- B.Weight
- C.Length
- D.Size number

Ans: A

51.The dial test indicator shows the measurement as?
A.The direct reading of the dimension
B.The magnified small variations in sizes through a pointer
C.The actual size of the component
D.The difference between the two steps of 5mm

Ans: B

52.The equivalent of 1 metre in the inch system is?
A.37.39"
B.0"
C.39.37"
D.36"

Ans: C

53.A set of number drill series consists of drills in the following ranges. Indicate the correct range?
A.1 to 80
B.0 to 100
C.1 to 40
D.0 to 50

Ans: A

54.Which instrument is used for checking the parallelism of filed surfaces?
A.Caliper
B.Steel rule
C.Try square
D.None of above

Ans: C

55.The common sizes of an engineer's steel rule?
A.6 inch
B.24 inch
C.12 inch
D.All of above

Ans: D

56.The common pitches of hacksaw blade is?
A.1.8 mm
B.1.4 mm
C.0.8 mm
D.All of above

Ans: D

57.The materials from which the marking table is made?
A.Medium carbon
B.Cast iron
C.Mild steel
D.None of above

Ans: B

58.The size of the dividers are specified by the?
A.Distance between the points when fully opened
B.Total length of the legs
C.Distance between the pivot and the point

D.Length of legs without the points

Ans: C

59.When the taper shank of the drill is larger than the machine spindle, the device to hold the drill is?

- A.Chuck and key
- B.Drill drift
- C.Taper socket
- D. Drill sleeve

Ans: C

60.The clearance angle of a drill is between?

- A.12 deg to 20 deg
- B.3 deg to 5 deg
- C.15 deg to 20 deg
- D.8 deg to 12 deg

Ans: D

61.The least count of a vernier bevel protractor is?

- A.1 deg
- B.1 inch
- C.5'
- D.5 deg

Ans: C

62.Name of the chemical solution used for cleaning the parts of a micrometer after it is dismantled?

- A.Thinner
- B.Carbon tetrachloride
- C.Clean oil
- D.None of above

Ans: B

63.The pattern on the work surface caused by the movement of the cutting tool is called?

- A.Roughness
- B.Surface texture
- C.Waviness
- D.Roughness spacing

Ans: B

64.A sine bar is made of?

- A.Nickel steel
- B.High carbon steel
- C.Stabilized chromium steel
- D.High speed steel

Ans: C

65.The process of bevelling the end of the hole is called?

- A.Counterboring
- B.Spot facing
- C.Countersinking
- D.Reaming

Ans: C

66.The included angle of the groove of 'V' block is always?

- A.45 deg
- B.90 deg
- C.60 deg
- D.120 deg

Ans: D

67.Surface plates are made of?

- A.Alloy steels
- B.Fine grained cast iron
- C.High grade cast steel
- D.Wrought iron

Ans: B

68.In the number drill series, the largest drill size is?

- A.8.59 mm
- B.5.791 mm
- C.5.80 mm
- D.102 mm

Ans: B

69.The depth micrometer is used for the measurement of a wide range of sizes because?

- A.It has a very lengthy spindle
- B.It has adjustable stock for different size settings
- C.It has a lengthy graduated sleeve
- D.It has a number of extension rods for the different range of sizes

Ans: D

70.The relief angle provided behind the cutting edge is called?

- A.Helix angle
- B.Poing angle
- C.Clearance angle
- D.Chisel edge angle

Ans: C